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US006180370B1

(12) **United States Patent**
Queen et al.(10) Patent No.: **US 6,180,370 B1**
(45) Date of Patent: ***Jan. 30, 2001**(54) **HUMANIZED IMMUNOGLOBULINS AND METHODS OF MAKING THE SAME**(75) Inventors: **Cary L. Queen, Los Altos; Harold E. Selick, Belmont, both of CA (US)**(73) Assignee: **Protein Design Labs, Inc., Fremont, CA (US)**(*) Notice: **Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.****This patent is subject to a terminal disclaimer.**(21) Appl. No.: **08/484,537**(22) Filed: **Jun. 7, 1995****Related U.S. Application Data**

(63) Continuation-in-part of application No. 07/634,278, filed on Dec. 19, 1990, now Pat. No. 5,530,101, which is a continuation-in-part of application No. 07/590,274, filed on Sep. 28, 1990, now abandoned, which is a continuation-in-part of application No. 07/310,252, filed on Feb. 13, 1989, now abandoned, which is a continuation-in-part of application No. 07/290,975, filed on Dec. 28, 1988, now abandoned.

(51) Int. Cl.⁷ **A61K 39/395**
(52) U.S. Cl. **435/69.6; 435/172.3; 435/328; 530/387.3; 530/388.2; 424/133.1; 424/143.1**
(58) Field of Search **424/133.1, 143.1; 435/328, 69.6, 172.3; 530/387.3, 388.2**(56) **References Cited****U.S. PATENT DOCUMENTS**

4,578,335	3/1986	Urdal et al.	530/351
4,816,397	3/1989	Boss et al.	
4,816,565	3/1989	Honjo et al.	435/69.1
4,816,567	3/1989	Çabilly et al.	
4,845,198	7/1989	Urdal et al.	530/387
4,867,973	9/1989	Goers et al.	
5,198,359	3/1993	Taniguchi et al.	
5,225,539	7/1993	Winter	
5,530,101	* 6/1996	Queen et al.	
5,585,089	* 12/1996	Queen et al.	
5,693,761	* 12/1997	Queen et al.	
5,693,762	* 12/1997	Queen et al.	

FOREIGN PATENT DOCUMENTS

0 120 694	10/1984	(EP)
2-0120 694	10/1984	(EP)
1-0125 023	11/1984	(EP)
0171496	2/1986	(EP)
0173494	3/1986	(EP)
0184187	6/1986	(EP)
0256654	7/1987	(EP)
0239400	9/1987	(EP)
1-0239 400	9/1987	(EP)
2-0239 400	9/1987	(EP)
0266663	6/1988	(EP)
1 0318 554	6/1989	(EP)
0 323 806	7/1989	(EP)
1-0323 806	7/1989	(EP)
0 0328 404	8/1989	(EP)
0 365 209	4/1990	(EP)

2 0365 209	4/1990	(EP)
0 365 997	5/1990	(EP)
1-0368 684	5/1990	(EP)
2 0365 997	5/1990	(EP)
0 125 023	6/1991	(EP)
0456216	10/1991	(EP)
0460167	12/1991	(EP)
1-0519 596	12/1992	(EP)
1-0592 106	4/1994	(EP)
239400	8/1994	(EP)
2-0188 941	10/1987	(GB)
2188941	10/1987	(GB)
8928874	12/1989	(GB)
WO 86/05513	9/1986	(WO)
WO 87/02671	5/1987	(WO)
WO88/09344	12/1988	(WO)
WO 89/01783	3/1989	(WO)
WO89/09622	10/1989	(WO)
WO 90/07861	7/1990	(WO)
91/09967	7/1991	(WO)
WO 91/09966	7/1991	(WO)
WO 92/11018	7/1992	(WO)
WO 92/11383	7/1992	(WO)
WO92/11018	7/1992	(WO)
WO93/02191	2/1993	(WO)
WO 93006231	4/1993	(WO)
WO94/11509	5/1994	(WO)
WO 96/05229	2/1996	(WO)

OTHER PUBLICATIONS

George et al Current Methods in Sequence Comparison and Analysis in Macromolecular Sequencing and Synthesis, 127-148, 1988.*

Barton et al Protein Sequencing Alignment and Database Screening Protein Structure Prediction. 31-63, 1996.*

(List continued on next page.)

* cited by examiner

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(57) **ABSTRACT**

Novel methods for producing, and compositions of, humanized immunoglobulins having one or more complementarity determining regions (CDR's) and possible additional amino acids from a donor immunoglobulin and a framework region from an accepting human immunoglobulin are provided. Each humanized immunoglobulin chain will usually comprise, in addition to the CDR's, amino acids from the donor immunoglobulin framework that are, e.g., capable of interacting with the CDR's to effect binding affinity, such as one or more amino acids which are immediately adjacent to a CDR in the donor immunoglobulin or those within about 3 Å as predicted by molecular modeling. The heavy and light chains may each be designed by using any one or all of various position criteria. When combined into an intact antibody, the humanized immunoglobulins of the present invention will be substantially non-immunogenic in humans and retain substantially the same affinity as the donor immunoglobulin to the antigen, such as a protein or other compound containing an epitope.

30 Claims, 55 Drawing Sheets

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